

REMARKS**INTRODUCTION:**

In accordance with the foregoing, claim 13 has been canceled without prejudice or disclaimer, and claims 1, 7, 9, 11, 12, 14, 15, 16, 17, 18, 19, 25, and 26 have been amended. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-12 and 14-26 are pending and under consideration. Reconsideration is respectfully requested.

ENTRY OF RESPONSE UNDER 37 C.F.R. §1.116:

Applicant requests entry of this Rule 116 Response and Request for Reconsideration because:

(a) at least one of the rejected claims has been canceled thereby at least reducing the issues for appeal;

(b) it is believed that the amendments of claims 1, 7, 9, 11, 12, 14, 15, 16, 17, 18, 19, 25, and 26 put this application into condition for allowance;

(c) the amendments were not earlier presented because the Applicant believed in good faith that the cited prior art did not disclose the present invention as previously claimed;

(d) the amendments of claims 1, 7, 9, 11, 12, 14, 15, 16, 17, 18, 19, 25, and 26 should not entail any further search by the Examiner since no new features are being added or no new issues are being raised; and/or

(e) the amendments do not significantly alter the scope of the claims and place the application at least into a better form for appeal. No new features or new issues are being raised.

The Manual of Patent Examining Procedures sets forth in §714.12 that "[a]ny amendment that would place the case either in condition for allowance or in better form for appeal may be entered." (Underlining added for emphasis) Moreover, §714.13 sets forth that "[t]he Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The Manual of Patent Examining Procedures further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

AMENDMENT OF CLAIM 7:

Claim 7 has been amended to place a period at the end of the claim.

REJECTION UNDER 35 U.S.C. §112:

In the Office Action, at pages 2-3, numbered paragraph 3, claims 1-24 were rejected under 35 U.S.C. §112, second paragraph, for the reasons set forth therein. This rejection is traversed and reconsideration is requested.

The Examiner submitted that the terminology “an automatic tension adjusting part” was unclear. It should be noted that [0034] and [0050] of the specification recite:

[0034] The pulley fixing apparatus 100 has a pulley fixing part 130 rotatably fixing the driven pulley 178 on the bracket 111 of the frame 110, a sliding part 120 movably supporting the pulley fixing part 130 at the bracket 111, and an automatic tension adjusting part 150 disposed between the pulley fixing part 130 and the bracket 111 to elastically urge the pulley fixing part 130 in a direction such that the driven pulley 178 imparts a predetermined tension to the power transmitting belt 123. (emphasis added)

...

[0050] Alternatively, according to another aspect, after the tension of the carrier transfer belt 115 installed on the driven pulley 178 is adjusted by the automatic tension adjusting part 150 or forcibly by user, the pulley fixing apparatus 100 is immovably locked to the pulley fixing part 130, to maintain the tension of the carrier transfer belt 115 in the adjusted state. (emphasis added)

Hence, it is respectfully submitted that the terminology “an automatic tension adjusting part” recites an embodiment of the present invention as set forth in [0034] of the specification and is definite under 35 U.S.C. §112, second paragraph.

The Examiner submitted that claims 15 and 16 were unclear. The anti-release portion is described in paragraph [0045] and paragraph [0049] of the specification, which recite:

[0045] The first fixing portion 152, 141 has a first hook 152 located at the one end of the elastic pulling spring 151, and a first fixing protrusion 141, which is located at the other end of the elongated plate member 131 of the pulley fixing part 130, and has a first fixing groove 143 to receive and fix the first hook 152. The second fixing portion 153, 112 has a second hook 153 located at the other end of the elastic pulling spring 151, and a second fixing protrusion 112 located at the bracket 111 to protrude through a long penetrated hole 139 positioned at the elongated plate member 131 of the pulley fixing part 130. The second fixing protrusion has a second fixing groove 113 to receive and fix the second hook 153. (emphasis added)

[0049] According to one aspect, such an anti-release portion is constructed as the second fixing portion 153, 112, so that a separate fixing part, such as a screw, is not required. Accordingly, the second hook 153 of the second fixing portion 153, 112 has a width larger than that of the penetrated hole 139, to prevent being released. (emphasis added)

The terminology “anti-release portion” in claim 16 has been amended to recite:

The apparatus according to claim 15, wherein:

the anti-release portion comprises a second hook having a width that is greater than a width of the penetrated hole does not include a separate fixing part.

Hence, "the anti-release portion" terminology is now submitted to be clear and to be definite under 35 U.S.C. §112, second paragraph.

The Examiner submitted that the terminology "wide" and "narrow" rendered claim 9 indefinite. In accordance with FIG. 5, claim 9 has been amended to recite:

The apparatus according to claim 3, wherein:

the slide protrusion comprises a projection having a support portion and a sliding end; and

the protrusion guide hole comprises a ~~wide~~first lateral hole portion receiving the sliding end, and a ~~narrow~~second lateral hole portion receiving and guiding the support portion, wherein the second lateral hole portion is narrower than the first lateral hole portion.

Hence, amended claim 9 is now submitted to be clear and definite under 35 U.S.C. §112, second paragraph. Claims 11 and 12, which depend from claim 9, have also been amended in accordance with the terminology changes recited above.

Thus, claims 1-24 are submitted to be clear and definite under 35 U.S.C. §112, second paragraph.

REJECTION UNDER 35 U.S.C. §102:

In the Office Action, at pages 3-5, numbered paragraph 5, claims 1-8, 13-15, 19, 20, 25, and 26 were rejected under 35 U.S.C. §102(b) as being anticipated by Holbrook (USPN 4,969,859; hereafter, Holbrook). This rejection is traversed and reconsideration is requested.

Independent claim 1 has been amended to incorporate the features of claim 13 to show more clearly differences between Holbrook and the present claimed invention. Claim 13 has been cancelled without prejudice or disclaimer. Hence, independent claim 1 has been amended to recite:

A pulley fixing apparatus for an image forming apparatus including a frame, a driving motor, and a power-transmitting belt driven by the driving motor and a driving pulley, the pulley fixing apparatus comprising:

a pulley fixing part rotatably fixing a driven pulley on the frame;

a sliding part movably supporting the pulley fixing part on the frame; and

an automatic tension adjusting part including an elastic pulling spring disposed between the pulley fixing part and the frame to elastically bias the pulley fixing part in a first direction and impart a predetermined tension to the power-transmitting belt, wherein:

the pulley fixing part comprises a first fixing portion;

the frame comprises a second fixing portion arranged between the first fixing portion and the driven pulley; and

the elastic pulling spring has one end fixed at the first fixing portion and another end fixed at the second fixing portion to push the driven pulley outwardly from the second fixing portion of

the frame.

Independent claims 19, 25 and 26 have been amended similarly.

It is respectfully submitted that the present claimed invention recites that a driven pulley is externally pushed by an elastic pulling spring, both ends of which are fixed to the second fixing portion. That is, in the present claimed invention, the pulley fixing part comprises a first fixing portion; the frame comprises a second fixing portion arranged between the first fixing portion and the driven pulley; and the elastic pulling spring has one end fixed at the first fixing portion and another end fixed at the second fixing portion to push the driven pulley outwardly from the second fixing portion of the frame.

In contrast, Holbrook recites that when the spring in the Holbrook invention is in tension, i.e., is stretched, the tab (coupled to the spring) of the slide plate on which the hub and rim roller are mounted, is pulled inward. Hence, the elements of Holbrook are different from, and function differently from, the elements of the present claimed invention.

It is respectfully submitted that that the court has held that an anticipating reference "must disclose every element of the challenged claim and enable one skilled in the art to make the anticipating subject matter." PPG Industries, Inc. v. Guardian Industries Corp., 75 F.3d 1558, 1566, 37 USPQ2d 1618, 1624 (Fed. Cir. 1996).

Thus, amended independent claims 1, 19, 25 and 26 are submitted not to be anticipated under 35 U.S.C. §102(b) by Holbrook (USPN 4,969,85). Since claims 2-8,14-15 and 20 depend from amended claims 1 and 19, respectively, claims 2-8,14-15 and 20 are submitted not to be anticipated under 35 U.S.C. §102(b) by Holbrook (USPN 4,969,85) for at least the reasons amended claims 1 and 19 are not anticipated under 35 U.S.C. §102(b) by Holbrook (USPN 4,969,85).

REJECTION UNDER 35 U.S.C. §103:

In the Office Action, at page 6, numbered paragraph 7, claims 21-24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Holbrook (USPN 4,969,859; hereafter, Holbrook) in view of Burgoon (USPN 5,141,083; hereafter, Burgoon). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

It is respectfully submitted that Holbrook discloses a belt tensioning apparatus that, as the Examiner admits, does not disclose an anti-push portion to prevent a fixing part from being pushed, having at least one projection/burr to protrude toward the fixing part. Burgoon discloses

brake pad for a disc brake system. There is no teaching or suggestion of combining the belt tensioning apparatus of Holbrook with the brake pad for a disc brake system of Burgoon.

In addition, in Ruiz and Foundation v. A.B. Chance Company, 69 USPQ2d 1690 (CAFC January 29, 2004), the court held:

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. Envtl. Designs, Ltd. v. Union Oil Co., 713 F.2d 693, 698 (Fed. Cir. 1983) (noting that "virtually all [inventions] are combinations of old elements."). The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result – often the very definition of invention. Section 103 precludes this hindsight discounting of the value of new combinations by requiring assessment of the invention as a whole. This court has provided further assurance of an "as a whole" assessment of the invention under § 103 by requiring a showing that an artisan of ordinary skill in the art at the time of invention, confronted by the same problems as the inventor and with no knowledge of the claimed invention, would select the various elements from the prior art and combine them in the claimed manner. In other words, the examiner or court must show some suggestion or motivation, before the invention itself, to make the new combination. See In re Rouffet, 149 F.3d 1350, 1355-56 (Fed. Cir. 1998). (emphasis added)

The Examiner submits that Burgoon discloses an anti-push portion to prevent a fixing part from being pushed, having at least one projection/burr to protrude toward the fixing part. However, the Examiner has not shown that an artisan of ordinary skill in the art at the time of invention, confronted by the same problems as the inventor and with no knowledge of the claimed invention, would select the various elements from the prior art and combine them in the claimed manner. Thus, it is respectfully submitted that the Examiner's comments discount the value of the new combination recited by the present claimed invention, are conclusory, speculative, and are not girded by evidence.

Also, even if combined, Holbrook and Burgoon do not teach amended independent claim 19. Thus, it is respectfully submitted that amended independent claim 19 is patentable under 35 U.S.C. §103(a) over Holbrook (USPN 4,969,859) in view of Burgoon (USPN 5,141,083). Since claims 21-24 depend from amended claim 19, claims 21-24 are submitted to be patentable under 35 U.S.C. §103(a) over Holbrook (USPN 4,969,859) in view of Burgoon (USPN 5,141,083) for at least the reasons that amended independent claim 19 is patentable under 35 U.S.C. §103(a) over Holbrook (USPN 4,969,859) in view of Burgoon (USPN 5,141,083).

EXAMINER'S RESPONSE TO ARGUMENTS:

In the Office Action, at pages 6-7, the Examiner presented some further comments

regarding the applicant's remarks.

Regarding the Examiner's comment that the "automatic tension adjusting part" imparts an elastic force, but does not explain how it is adjustable, paragraph [0034], recited below for the convenience of the Examiner, of the specification describes how the elastic force is applied:

[0034] The pulley fixing apparatus 100 has a pulley fixing part 130 rotatably fixing the driven pulley 178 on the bracket 111 of the frame 110, a sliding part 120 movably supporting the pulley fixing part 130 at the bracket 111, and an automatic tension adjusting part 150 disposed between the pulley fixing part 130 and the bracket 111 to elastically urge the pulley fixing part 130 in a direction such that the driven pulley 178 imparts a predetermined tension to the power transmitting belt 123. (emphasis added)

Hence, it is respectfully submitted that, as shown in FIG. 5 of the present invention, the automatic tension adjusting part comprises an elastic spring, which is adjustable because the elastic spring has one end fixed at the first fixing portion and another end fixed at the second fixing protrusion of the second fixing portion, and the second fixing protrusion is movable with respect to the elongated plate member, on which the pulley fixing part and a driven pulley support supporting the driven pulley are located, thus allowing a predetermined tension to be applied to the elastic spring.

With respect to the Examiner's concern that the anti-release portion does not include a separate fixing part, the anti-release portion is described in paragraph [0049] of the specification, which recites:

[0049] According to one aspect, such an anti-release portion is constructed as the second fixing portion 153, 112, so that a separate fixing part, such as a screw, is not required. Accordingly, the second hook 153 of the second fixing portion 153, 112 has a width larger than that of the penetrated hole 139, to prevent being released. (emphasis added)

For clarity, the terminology "anti-release portion" in claim 16 has been amended to recite:

The apparatus according to claim 15, wherein:
the anti-release portion comprises a second hook having a width that is greater than a width of the penetrated hole~~does not include a separate fixing part.~~

Hence, "the anti-release portion" terminology is now submitted to be clear.

Claims 17 and 18 have been amended to recite independent claims that recite the features of amended claim 1. Hence, claims 17 and 18 are now submitted to be in allowable form.

Claims 9, 11 and 12 have been amended to replace the terminology "wide " and "narrow" with ---first lateral--- and ---second lateral--- for clarity. This amendment is supported by, for

example, FIG. 5. Thus, claims 9, 11 and 12 are now submitted to be clear.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited. At a minimum, this Amendment should be entered at least for purposes of Appeal as it either clarifies and/or narrows the issues for consideration by the Board.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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